



THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

NOV 21 2016

Ms. Katherine Stackler
Manhasset Middle School
34 Rockwood Road
Manhasset, New York 11030

Dear Katherine:

I always enjoy hearing from young people who care about the environment, and I appreciated your thoughts and passionate concerns about climate change. The U.S. Environmental Protection Agency shares your concerns. Engaged students like you who care about our environment are one of many reasons why I am optimistic about the environmental health of our nation and our planet.

As you already may know, greenhouse gases are trapping more energy from the sun. This warms our planet and causes the oceans to absorb more heat, resulting in an increase in sea-surface temperatures and rising sea levels. You can learn more about greenhouse gases and the causes and effects of a warming climate in the EPA's report, *Climate Change Indicators in the United States, 2016*, available at www.epa.gov/climate-indicators.

Hurricanes, like all storms, are complicated natural events. Although climate change does not by itself cause hurricanes, these storms are affected by the amount of heat in the air and ocean. As climate change causes the air and oceans to warm, it is likely that the conditions that can lead to more powerful and damaging hurricanes will become more common. This is referred to as hurricane intensity. In turn, greater storm intensity may cause greater storm surge, resulting in larger damages. Storm surges flood low-lying areas, damage property, disrupt transportation systems, destroy habitat and threaten human health and safety. Storm surges can cause even more devastating impacts when sea levels are already at a higher level due to climate change. More information about the link between other types of extreme weather and climate change is available at www.epa.gov/climate-change-science/understanding-link-between-climate-change-and-extreme-weather.

We cannot stop hurricanes from happening, but we can reduce the amount of greenhouse gases in the atmosphere and reduce the probability that the most intense storms will be likely to occur. The EPA is taking a number of steps to do this. Just last year the EPA released the Clean Power Plan as a part of President Barack Obama's Climate Action Plan. The Clean Power Plan proposes to cut carbon pollution from existing power plants, the largest source of greenhouse gas emissions in the United States. The EPA has also collected comprehensive emissions data from more than 8,000 facilities and suppliers in the United States, which improves our ability to make informed policy, business and regulatory decisions. We also have set groundbreaking mobile-source and renewable-fuel standards to increase fuel efficiency for all new cars and trucks sold in the United States through 2025. This will save consumers \$1.7 trillion at the pump and decrease carbon pollution by more than 6 billion metric tons.

More information about what the EPA is doing to reduce carbon emissions and address climate change is available at www.epa.gov/climatechange/what-epa-doing-about-climate-change. The EPA is also

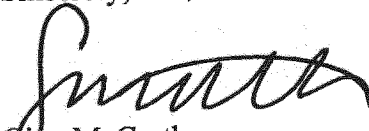
working with cities and towns to build more resilient communities to prepare for the impacts of a changing climate, including severe weather events like hurricanes. Learn more about the EPA's adaptation efforts at www.epa.gov/climatechange/adapting-climate-change.

Protecting people and the environment is the EPA's mission, but we cannot do this work alone, and that is why I encourage you to stay involved. Just as it takes many drops of water to fill a bucket, the actions of many individuals are necessary to keep our environment clean, safe and healthy. I encourage you to share what you've learned about extreme weather and climate change with others and to keep asking questions.

More information and ideas on how you can help your friends, classmates and family to do more to protect public health and our environment is available at www.epa.gov/climatechange/kids/.

Thank you for your concern about the quality of our environment and for doing your part to protect it.

Sincerely,



Gina McCarthy